Private Environmental Standards and Developing Country Exports

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Private Environmental Standards and Developing Country Exports

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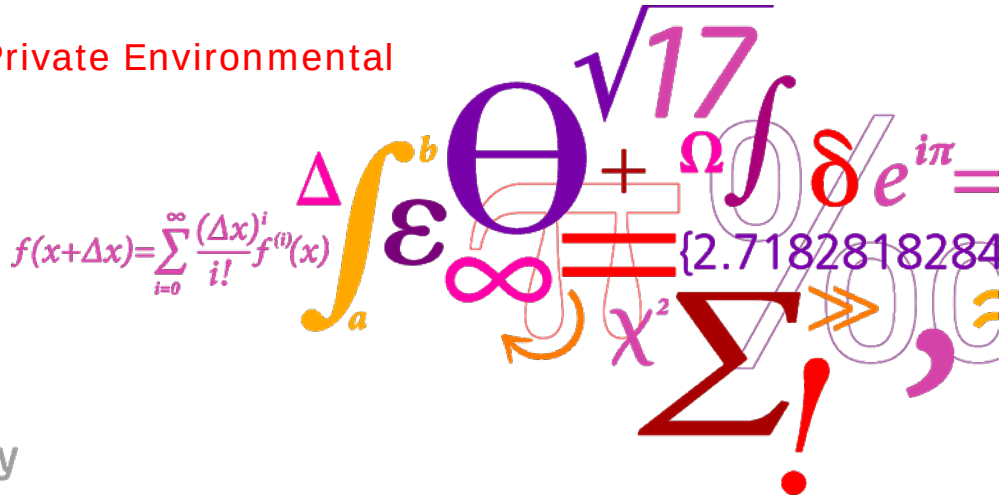


Risø DTU
National Laboratory for Sustainable Energy

Overview

1. **Climate-related standards**
   - Product carbon footprinting standards and schemes
2. **Standards focusing on emissions from transportation**
   - Transport restrictions in private organic standards
3. **Implementation of organic standards in Africa**
   - Revenue effects of smallholder organic contract farming schemes in Uganda

1. What is a product carbon footprint?

- **Information about the total amount of GHGs emitted during the life cycle of a good or service**
- **Grams CO2-eq. per unit of product**
- **Consumption approach to climate change mitigation (vs. regulation at source)**

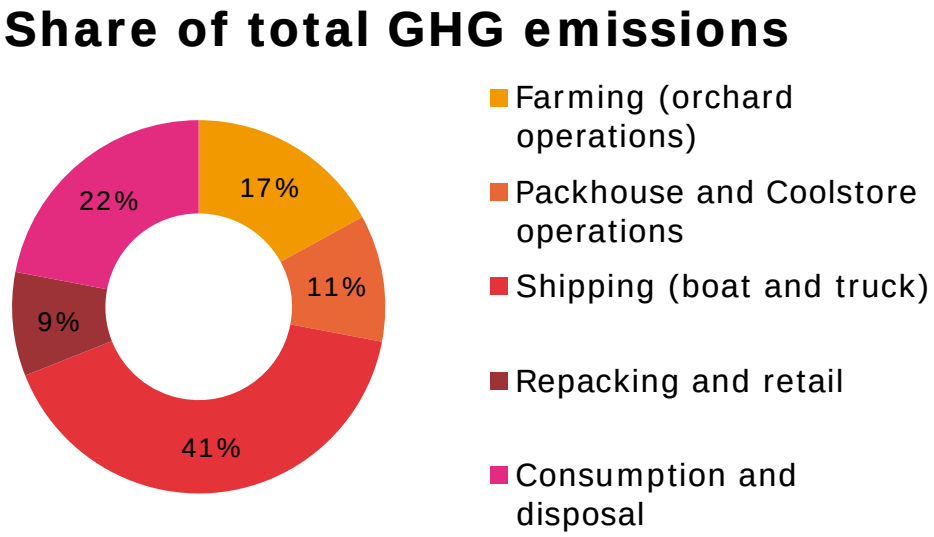
Life cycle analysis

- **Method for calculating the sum of GHG emissions from activities along the entire life cycle of a product**
- **From “Cradle-to-grave” or “Farm-to-fork” or “Field-to-Wheel”**

Source: www.zespri.com

- **Engages all value chain actors**

The carbon footprint of a New Zealand kiwi fruit eaten in Geneva



Data source: www.zespri.com

Total footprint: 1.74 kg CO2 Eq. per 1 kg of fruit

No generally accepted methodology: the quality of calculations differs greatly and there is great scope for manipulation

What can PCF be used for?

- **Help prioritise GHG reduction efforts along the entire supply chain**
  - Zespri Kiwifruit focuses reduction efforts at the orchard, packhouse, coolstore and transport stages
- **Compare the footprint of "similar" products delivered by different supply chains**
  - Broccoli imported to Sweden from Ecuador have a lower PCF than those imported from Spain
- **Compare the footprint of "similar" products with different attributes**
  - The footprint of a 330 ml can of Coke is half the size of 330 ml delivered in a glass bottle (Coca cola PCFs)

What can PCF be used for? (2)

- **Designate products as “carbon neutral” through off-setting**
  - E.g. the “Stop Climate Change” scheme in Germany
- **Help demonstrate corporate commitment to climate change through display of PCF information on packaging, websites and in CSR reports**
  - to customers, investors and lawmakers

Public PCF standards and initiatives

- **PAS 2050 – BSI and Carbon Trust (October 2008)**
- **ISO 14067 (exp. 2011)**
- **WRI-WBCSD Product and Supply Chain GHG Accounting and Reporting Standard (exp. 2011)**
- **Japanese government initiative (trial period started April 09)**
- **New French environmental law – *Grenelle 2, Article 85* (proposal, exp. 2011)**
- **European Commission – study on PCF methods and initiatives (2009–10)**

Carbon label of Sapporo beer (proposed)

Private PCF schemes and standards

- **Private organisations calculating and certifying carbon footprint information for products**
- **Operated by consultants, NGOs, retailers and branded manufacturers**
- **15 schemes worldwide – EU, North America, NZ, Australia(?), but soon also Asia**
- **> 3000 footprinted products, most by Carbon Labelling Company (UK)**
- **Wide product range, but mainly food / drinks**
- **First schemes in 2007**

Private PCF Schemes – certification criteria

- **Rules for calculating the PCF**
  - poorly specified
  - Sometimes biased against DC production systems
  - No biases against distant producers (?)
- **Commitment to reducing PCF or corporate level emissions**
- **Carbon neutrality through purchase of carbon credits**
- **Other environmental criteria**

Concluding observations on PCF

- **Rising number of private schemes and labelled products, but still small scale – at present low impact on DC exports**
  - Low transparency and weak verification systems are major weaknesses
- **Increasing interest in PCF from governments and international organisations**
  - At least 3 public standards by 2011 (BSI, WRI, ISO)
  - Mandatory labelling is being discussed
- **Key issues for developing countries if PCF is scaled up**
  - LCA analyses are costly and the analytical capacity is weak
  - Huge data problems – existing LCA databases not relevant for DCs
  - No or little influence on standard setting

2. Transport restrictions in private organic standards (fresh FFVs)

	Share of imports in organic fresh fruits and vegetables	Share of all organic food certified by standard setter	
Sweden	40% (vegs) 90% (fruits)	KRAV	90%
Switzerland	15%	Bio-Suisse	90%
United Kingdom	76%	Soil Association	75%

Sources: Gibbon (2009); Gibbon and Bolwig (2007)

	Proposed standards	Recent development
Bio-Suisse	Informal ban on certifying organic products imported by air, since 1970s	Formalised in 1999. special provisions for spices. FFVs from outside Mediterranean not re-certified at all
KRAV Climate Labelling of Food (Draft, 2008)	Max. allowed emissions from transport of 200g and 300g of CO2-eq. per kg of plant product (100g in Swedish production season)	Criteria removed from standard after critique from retailers and others
Soil Association Air Freight Consultation (2007-08)	Restrict or ban air-freight of organic products	Proposal shelved after two rounds of broad consultations

No or selective use of scientific work on climate effects of transportation relative to other emission sources

3. Implementation of organic standards in Africa through smallholder contract farming

Does participation in organic contract farming schemes make a difference to smallholder revenue, and if so how?

Does the use of organic practices have an independent impact on revenue?

Why is organic certification interesting?

- **Farmers and exporters**: Access to price premia and expanding markets
- **Exporters**: protect margins during low price cycles, allow product differentiation, and improve image (CSR)
- **Farmers**: protect revenues, give access to technical advice and other resources

Why is contract farming interesting?

- Facilitate cheaper (group) certification to standards
- Provide security of supply for exporters and security of demand for farmers
- Allow exporters to specify own (additional) quality requirements
- Provide farmers with otherwise unavailable services

Organic contract farming schemes in Uganda (2005/06)

- **Kawacom Organic and Utz Certified Arabica Coffee Project, Sipi**
  - 3870 farmers, certified in 2001
  - 715 tons coffee
- **Esco Organic Cocoa-Vanilla Project**
  - 1721 farmers, certified in 2001
  - 269 tons cocoa, 50 tons vanilla
- **Biofresh Organic Pineapple Project**
  - 34 farmers, certified in 2004
  - 150 tons pineapple

Key features of contracts

	Kawacom Coffee	Esco Cocoa-Vanilla	Biofresh Pineapple
Free certification	+	+	+
Free training	+	+	+
Free inputs	Selective	Selective	Selective
Price premium	15%	30% cocoa 100% vanilla	40%
Buy all crop?	Subject to quality	Subject to quality	Subject to quality and demand

Source: Gibbon and Bolwig (2008)

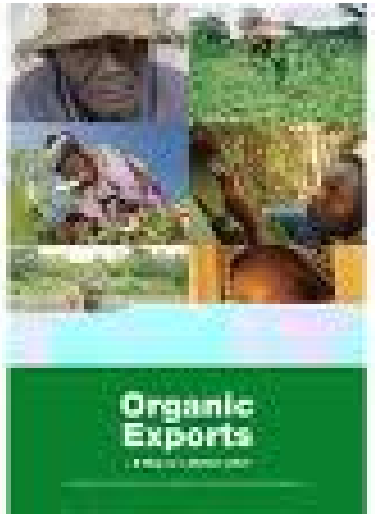
Revenue effects of scheme participation

	Kawacom Coffee	Esco Cocoa-Vanilla	Biofresh Pineapple
% of total sales sold under contract	73%	58%	24%
Increase in net revenue from organic crop	75%	62%	46%
Revenue effect of use of organic practices	*9%*	*30%*	*None*

Sources: Gibbon and Bolwig (2008); Bolwig, Gibbon and Jones (2009)

Concluding observations on organics

- Certified organic farming is more profitable than ‘organic by default’ systems
- But its superiority is bound up with contract arrangements giving tangible and transparent incentives to both farmers and exporters
- Donor support to certification and training reduces exporters’ perceived risks in ‘going organic’
- The full potential of these arrangements is far from realised



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